

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended): ~~An imbalance~~ An imbalance measuring device for ~~rotors~~ a rotatable rotor having a rotary behavior $\langle 1 \rangle$, with ~~essentially one~~ a bearing device ~~for as a~~ static fluid bearing for ~~a rotatable~~ the rotor $\langle 1 \rangle$, a device to change the rotary ~~behaviour~~ behavior of the rotor $\langle 1 \rangle$, at least one measuring transducer $\langle 6 \rangle$ which supplies signals and captures the effects of the imbalance of the rotor $\langle 1 \rangle$ in a measuring process, a device to generate a reference signal, and an evaluation device for the signals which the measuring transducer supplies using the reference signal, ~~characterized in that~~ wherein the bearing device has at least two open, fluid-supplied bearing shells $\langle 11, 11' \rangle$ to receive sections of the rotor periphery and at least one bearing plate $\langle 12, 12' \rangle$ which is assigned to ~~a rotor~~ an end surface of the rotor, rigidly supported and supplied with fluid, ~~in that~~ wherein a device to capture the rotary ~~behaviour~~ behavior of the rotor $\langle 1 \rangle$ is

provided, ~~and in that~~ wherein the device to change the rotary ~~behaviour~~ behavior is decoupled from the rotor ~~(1)~~ during the measuring process, ~~which~~ that takes place with rotary ~~behaviour~~ behavior which is constant or ~~preferably~~ variable over time, and wherein the bearing shells are arranged exchangeably on the bearing device, and the bearing device has a fluid supply system, which makes possible a fluid-proof joining of the bearing shells which are to be exchanged, and have different fluid channels to the bearing device.

Claims 2-3 (Canceled).

Claim 4 (Currently Amended): ~~Imbalance~~ The imbalance measuring device according to claim 1, wherein two rigidly ~~suppor~~ ~~te and supported and binding,~~ ~~at~~ fluid-supplied bearing plates ~~(12, 12')~~ which enclose the two rotor end surfaces between them are provided.

Claim 5 (Currently Amended): ~~Imbalance~~ The imbalance measuring device according to claim 1, wherein the device to change the rotary ~~behaviour~~ behavior is a belt drive (5), the

belt of which can be put on at two ~~essentially~~ substantially opposite rotor positions.

Claim 6 (Currently Amended): ~~Imbalance~~ The imbalance measuring device according to ~~Claim~~ claim 5, wherein the belt drive ~~(5)~~ has a V-shaped area ~~(5)~~ with a changeable included angle, within which the rotor ~~(1)~~ is arranged.

Claims 7-8 (Canceled).

Claim 9 (New): An imbalance measuring device for a rotatable rotor having a rotary behavior, with a bearing device as a static fluid bearing for the rotor, a device to change the rotary behavior of the rotor, at least one measuring transducer which supplies signals and captures the effects of the imbalance of the rotor in a measuring process, a device to generate a reference signal, and an evaluation device for the signals which the measuring transducer supplies using the reference signal, wherein the bearing device has at least two open, fluid-supplied bearing shells to receive sections of the rotor periphery and first and second bearing plates, each bearing plate assigned to a

respective end surface of the rotor, rigidly supported and supplied with fluid, wherein a device to capture the rotary behavior of the rotor is provided, wherein the device to change the rotary behavior is decoupled from the rotor during the measuring process that takes place with rotary behavior which is constant or variable over time, and wherein the first and second bearing plates are arranged exchangeably on the bearing device or a component, which cannot oscillate, of the imbalance measuring device, and the bearing device or component has a fluid supply system, which makes possible a fluid-proof joining of the bearing plates which are to be exchanged, and have different fluid channels, to the bearing device or component.